

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	932	359/846-849.ccls.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/27 09:14
L2	91812	(duty adj ratio) or (duty adj cycle)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/27 09:14
L3	9	1 and L2	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/27 09:16
L4	164263	(pulse-width adj modulat\$3) or (pulse adj width-modulat\$3) or (pulse with modulat\$3) or (PWM) or (pulse adj wave adj modulat\$3) or (pulse-wave adj modulat\$3) or (pulse adj wave-modulat\$3)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/27 09:16
L5	13	1 and L4	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/27 09:16
S2	28	((TAKAYUKI) near2 (IDE)).INV.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/27 09:09
S3	1463	359/291.ccls.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 09:00
S4	409	359/295.ccls.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 09:30
S5	2801	359/290-291.ccls. 359/295.ccls. 359/298.ccls. 359/315.ccls. 359/318.ccls. 359/264.ccls.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 09:00

## EAST Search History

S6	2	"6693735".pn.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 09:40
S7	91749	(duty adj ratio) or (duty adj cycle)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 09:40
S8	164121	(pulse-width adj modulat\$3) or (pulse adj width-modulat\$3) or (pulse with modulat\$3) or (PWM) or (pulse adj wave adj modulat\$3) or (pulse-wave adj modulat\$3) or (pulse adj wave-modulat\$3)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 09:42
S9	58	S7 and S8 and S5	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 10:00
S10	402254	resonance or resonant	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 09:43
S11	15	S9 and S10	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 09:43
S12	2	"6867896".pn.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 10:01
S13	2	"6674562".pn.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 10:05
S14	2	"5835255".pn.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 10:05

## EAST Search History

S15	3792	359/196-197.ccls. 359/212-214. ccls. 359/223-224.ccls.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 10:22
S16	24	S7 and S8 and S15	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 10:26
S17	37858	S7 same (chang\$3 or vary\$3 or adjust\$4 or alter\$3)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 10:28
S18	65	S17 and (S5 or S15)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 10:29
S19	5	deform and S18	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 10:29
S20	14	deform\$4 and S18	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 10:29
S21	14281	audible with frequency	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 13:05
S22	1826	higher same S21	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 13:04
S23	2	(S5 or S15) and S22	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 13:04
S24	21672	audible same frequency	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 13:34

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S25	2395	higher same S24	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 13:05
S26	116880	"359".clas.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 13:05
S27	12	S25 and S26	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 13:06
S28	0	S24 and S5	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 13:07
S29	58	S24 and S26	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 13:09
S30	4064	deformable with mirror	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 13:09
S31	1636	frequency and S30	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 13:12
S32	104	S24 and S30	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 13:10
S33	570	S26 and S31	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 13:12
S34	194	S5 and S31	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 13:14

## EAST Search History

S35	4	(hear\$3 or audible) and S34	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 13:15
S36	56	(Hz or KHz) and S34	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 13:43
S37	280048	frequency with voltage	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 13:43
S38	25	S36 and S37	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 13:34
S39	25	S26 and S38	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 13:35
S40	174304	frequency with driv\$3	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 14:04
S41	47198	(Hz or KHz) and S40	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 14:05
S42	1113	S26 and S41	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 13:44
S43	103	S5 and S41	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 13:44
S44	1982795	signal with (driv\$3 or control)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 14:04

## EAST Search History

S45	1528	S30 and S44	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 14:04
S46	447444	(Hz or KHz) or audible	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 14:05
S47	428	S45 and S46	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 14:06
S48	104	S45 and audible	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 14:07
S49	405	S45 and (khz or hz)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 14:36
S50	223457	current with limit\$4	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 14:37
S51	64	S5 and S50	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 14:37
S52	5714	trapezoid\$2 with wave\$5	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 15:11
S53	7	S5 and S52	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 15:13
S54	87	S26 and S52	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 15:13

## EAST Search History

S55	342791	substrate with silicon	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 15:34
S56	4024795	resist\$4 or induct\$4	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 15:38
S57	178128	S55 and S56	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 15:38
S58	504	S5 and S57	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 15:39
S59	710994	resistor or inductance	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 15:38
S60	37462	S55 and S59	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 15:39
S61	66	S5 and S60	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/03/22 15:39